

### **REMARKS**

Claims 1-3, 5-26, 38, 40-44 and 46-163 were pending in the application. Claims 13-16, 26, 38, 46, 47, 49-84, and 90-126 has been amended. Claims 164-282 have been added. Therefore, claims 1-3, 5-26, 38, 40-44 and 46-282 are currently pending. No new matter has been added.

#### ***Personnel Interview***

Applicants thank Examiner Qazi for the personnel interview with Elizabeth Hanley and Cynthia Soroos, Applicants' attorneys, on February 13, 2008. During the interview, the outstanding rejections and the amendments to the claims and specification, as presented herein, were discussed and agreed upon. Applicants submit a terminal disclaimer in compliance with 37 C.F.R. 1.321 (c) or (d) over U.S. Patent No. 7,326,696, per the request of the Examiner.

Claims 13-16, 26, 38, 46, 47, 49-84, and 90-126 have been amended. Support for the amendments to claims 13 and 16 can be found, for example, at least in claim 4 as originally filed. Claims 15, 16, 26, 38, 46, 47, 49-84, and 90-126 have been amended to clarify the invention and support can be found throughout the claims and the specification as originally filed. No new matter has been added.

Claims 164-282 have been added. Support for new claims 164 and 174-210 can be found in the specification as originally filed, for example, at least on page 5, line 34 through page 6, line 4, page 8, lines 5-10, and in claims 14, 15, and 26 as originally pending. Support for new claims 166-173 and 211-246 can be found in the specification as originally filed, for example, at least on page 19, lines 18-26 and page 25, lines 4-12. Support for new claims 165 and 247-282 can be found in the specification as originally filed, for example, at least on page 4, lines 2-6. No new matter has been added.

The specification has been amended to correct an obvious error in naming an intermediate. It is noted that the intermediate was properly named in Example 1 (e.g., on page 30, lines 12-37), which describes the synthesis of the intermediate, and in all other occurrences within the Examples where derivatized minocyclines are formed (e.g., on page 31, lines 2, 22, and 30). Support can also be found in the general reaction schemes, e.g., see Schemes 1 and 4 on pages 7 and 12, respectively. No new matter has been added.

Amendments to the claims should in no way be construed as an acquiescence to any of the Examiner's rejections. Amendments to the claims are being made solely to expedite prosecution of the above-identified application. Applicants reserve the option to further prosecute the same or

similar claims in the present or another patent application. The amendments to the claims are not related to any issues of patentability.

Applicants note with appreciation that the rejection of the claims under 35 U.S.C. § 102 (b), §112, first paragraph, and the double patenting rejection over U.S.S.N. 11/069,197 have been withdrawn.

***Rejection of Claims 15, 16, 48-55, and 62-82 under 35 U.S.C. § 112, second paragraph***

Claims 15, 16, 48-55 and 62-82 are rejected under 35 U.S.C. § 112, second paragraph as being “improperly dependent on claim 1.”

In particular, the Examiner states that “there [is] no carbon link at 7-position.” Applicants note that each of the compounds claimed have a nitrogen at the 7-position, and do not include a “carbon link at the 7-position.”

The Examiner also found that claim 16 improperly depends on claim 1, because it referred to an “aminoalkyl” group. Applicants respectfully submit that claim 16 has been amended such that it no longer refers to an “aminoalkyl” group as objected to by the Examiner.

Therefore, Applicants respectfully request that this rejection of the claims under 35 U.S.C. § 112, second paragraph be withdrawn.

***Rejection of Claims 1-3, 5-26, 38, 40-44, and 46-163 under 35 U.S.C. §103(a)***

Claims 1-3, 5-26, 38, 40-44, and 46-163 are rejected under 35 U.S.C. §103 (a) as being unpatentable over WO 01/87823. Specifically, the Examiner asserts that the compounds of the invention are unpatentable over compounds of Structures C to F on page 5, Structures G and H on page 6, and Structures I and J on page 7.

Applicants respectfully traverse. Independent claim 1 is directed to tetracycline compounds of formula I in which the R<sup>9</sup> is an aminomethyl moiety (e.g., a moiety of the formula NH-CH<sub>2</sub>— wherein the CH<sub>2</sub> group is attached to the 9 position of the tetracycline compound).

In contrast and as discussed and agreed upon during the personnel interview, WO 01/87823 describes compounds of formula C-F, G, H, I, and J wherein R<sup>9</sup> is hydrogen, amino, azido, nitro, acylamido, hydroxyl, ethoxythiocarbonylthio, **mono(lower alkyl)amino**, halogen, diazonium, **di(lower alkyl)amino** and RCH(NH<sub>2</sub>)CO; wherein R is hydrogen or lower alkyl. WO 01/87823 describes compounds with amino groups directly linked at the 9-position to the tetracycline core.

WO 01/87823 fails to teach or suggest compounds with an amino methyl moiety (*e.g.*, a moiety of the formula  $\text{NH-CH}_2$ —wherein the  $\text{CH}_2$  group is attached to the 9-position of the minocycline compound), as claimed by Applicants. Applicants' claimed compounds would not have been obvious to the ordinarily skilled artisan in view of WO 01/87823 because there is no teaching or suggestion in WO01/87823 to make compounds with Applicants' claimed aminomethyl moiety, let alone at the  $\text{R}^9$  position as claimed by Applicants.

Therefore, Applicants respectfully request that this rejection of claims 1-3, 5-26, 38, 40-44, and 46-163 are rejected under 35 U.S.C. §103 (a) be withdrawn.

### **SUMMARY**

It is respectfully submitted that this application is in condition for allowance. If there are any remaining issues or the Examiner believes that a telephone conference with Applicants' Attorney would be helpful in expediting prosecution of this application, the Examiner is invited to call the undersigned at (617) 227-7400.

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Respectfully submitted,

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